



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:

10/714,343B

Source:

1 FWP

Date Processed by STIC:

10/29/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

~~TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE~~ CHECKER
VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebs/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box-1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):
U.S. Patent and Trademark Office, 220 20th Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202



IFWO

RAW SEQUENCE LISTING

DATE: 10/29/2004

PATENT APPLICATION: US/10/714,343B

TIME: 13:09:28

Input Set : A:\54275.8016.US01.ST25.txt

Output Set: N:\CRF4\10292004\J714343B.raw

3 <110> APPLICANT: Zengen, Inc.
 5 <120> TITLE OF INVENTION: Modified Alpha-MSH Peptides and Derviatives Thereof
 7 <130> FILE REFERENCE: 54275.8016.US01
 9 <140> CURRENT APPLICATION NUMBER: 10/714,343B
 10 <141> CURRENT FILING DATE: 2003-11-14
 12 <160> NUMBER OF SEQ ID NOS: 46
 14 <170> SOFTWARE: PatentIn version 3.1
 16 <210> SEQ ID NO: 1
 17 <211> LENGTH: 8
 18 <212> TYPE: PRT
 19 <213> ORGANISM: Artificial Sequence
 21 <220> FEATURE:
 22 <223> OTHER INFORMATION: Synthesized peptide
 24 <220> FEATURE:
 25 <221> NAME/KEY: MISC_FEATURE
 26 <222> LOCATION: (7)..(7)
 27 <223> OTHER INFORMATION: Xaa is Phe or DPhe
 30 <400> SEQUENCE: 1

Does Not Comply
Corrected Diskette Needed

W--> 32 His Phe Arg Trp Gly Lys Xaa Val

33 1 5
 36 <210> SEQ ID NO: 2
 37 <211> LENGTH: 8
 38 <212> TYPE: PRT
 39 <213> ORGANISM: Artificial Sequence
 41 <220> FEATURE:
 42 <221> NAME/KEY: MISC_FEATURE
 43 <222> LOCATION: (2)..(2)
 44 <223> OTHER INFORMATION: Xaa is Phe or DNal
 47 <220> FEATURE:
 48 <221> NAME/KEY: MISC_FEATURE
 49 <222> LOCATION: (2)..(2)
 50 <223> OTHER INFORMATION: Xaa is Phe or DNal
 53 <400> SEQUENCE: 2

needs explanation in 22207-22237
section

W--> 55 His Xaa Phe Trp Gly Lys Pro Val

56 1 5
 59 <210> SEQ ID NO: 3
 60 <211> LENGTH: 8
 61 <212> TYPE: PRT
 62 <213> ORGANISM: Artificial Sequence
 64 <220> FEATURE:
 65 <223> OTHER INFORMATION: Synthesized peptide
 67 <220> FEATURE:
 68 <221> NAME/KEY: MISC_FEATURE

delete - already shown
above

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Input Set : A:\54275.8016.US01.ST25.txt

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69 <222> LOCATION: (2)..(7)

70 <223> OTHER INFORMATION: Xaa is Phe or DPhe

73 <220> FEATURE:

74 <221> NAME/KEY: MISC_FEATURE

75 <222> LOCATION: (2)..(7)

76 <223> OTHER INFORMATION: Xaa is Phe or DPhe

79 <400> SEQUENCE: 3

W--> 81 His Xaa Arg Trp Gly Lys Xaa Val

82 1 5

85 <210> SEQ ID NO: 4

86 <211> LENGTH: 8

87 <212> TYPE: PRT

88 <213> ORGANISM: Artificial Sequence

90 <220> FEATURE:

91 <223> OTHER INFORMATION: Synthesized peptide

93 <220> FEATURE:

94 <221> NAME/KEY: MISC_FEATURE

95 <222> LOCATION: (7)..(7)

96 <223> OTHER INFORMATION: Xaa is an amino acid bearing a non-polar fnc group.

99 <220> FEATURE:

100 <221> NAME/KEY: MISC_FEATURE

101 <222> LOCATION: (7)..(7)

102 <223> OTHER INFORMATION: Xaa is an amino acid bearing a non-polar fnc group.

105 <400> SEQUENCE: 4

W--> 107 His Phe Arg Trp Gly Lys Xaa Val

108 1 5

111 <210> SEQ ID NO: 5

112 <211> LENGTH: 8

113 <212> TYPE: PRT

114 <213> ORGANISM: Artificial Sequence

116 <220> FEATURE:

117 <223> OTHER INFORMATION: Synthesized peptide

119 <220> FEATURE:

120 <221> NAME/KEY: MISC_FEATURE

121 <222> LOCATION: (8)..(8)

122 <223> OTHER INFORMATION: Xaa is an amino acid other than val having a non-polar functional

123 group or a hydrophobic functional group.

126 <220> FEATURE:

127 <221> NAME/KEY: MISC_FEATURE

128 <222> LOCATION: (8)..(8)

129 <223> OTHER INFORMATION: Xaa is an aa other than val having a non-polar functional group o

130 r a hydrophobic functional group.

133 <400> SEQUENCE: 5

W--> 135 His Phe Arg Trp Gly Lys Pro Xaa

136 1 5

139 <210> SEQ ID NO: 6

140 <211> LENGTH: 8

141 <212> TYPE: PRT

142 <213> ORGANISM: Artificial Sequence

*delete - already shown above**delete - already shown**delete*

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PATENT APPLICATION: US/10/714,343B

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Input Set : A:\54275.8016.US01.ST25.txt

Output Set: N:\CRF4\10292004\J714343B.raw

144 <220> FEATURE:
 145 <223> OTHER INFORMATION: Synthesized peptide
 147 <220> FEATURE:
 148 <221> NAME/KEY: MISC_FEATURE
 149 <222> LOCATION: (6)..(6)
 150 <223> OTHER INFORMATION: Xaa is an amino acid, not including Lys, having a non-polar

func

151 tional group.

154 <220> FEATURE:

155 <221> NAME/KEY: MISC_FEATURE

156 <222> LOCATION: (6)..(6)

157 <223> OTHER INFORMATION: Xaa is an amino acid, not including Lys, having a non-polar

funct

158 ional group.

161 <400> SEQUENCE: 6

W--> 163 His Phe Arg Trp Gly Xaa Pro Val

164 1 5

167 <210> SEQ ID NO: 7

168 <211> LENGTH: 8

169 <212> TYPE: PRT

170 <213> ORGANISM: Artificial Sequence

172 <220> FEATURE:

173 <223> OTHER INFORMATION: Synthesized peptide

175 <220> FEATURE:

176 <221> NAME/KEY: MISC_FEATURE

177 <222> LOCATION: (7)..(7)

178 <223> OTHER INFORMATION: X is an aa with positively charged functional group.

181 <220> FEATURE:

182 <221> NAME/KEY: MISC_FEATURE

183 <222> LOCATION: (7)..(7)

184 <223> OTHER INFORMATION: Xaa is an amino acid with positively charged functional group.

group.

187 <220> FEATURE:

188 <221> NAME/KEY: MISC_FEATURE

189 <222> LOCATION: (7)..(7)

190 <223> OTHER INFORMATION: Xaa is an amino acid with positively charged functional group.

group.

193 <400> SEQUENCE: 7

W--> 195 His Phe Arg Trp Gly Lys Xaa Val

196 1 5

199 <210> SEQ ID NO: 8

200 <211> LENGTH: 8

201 <212> TYPE: PRT

202 <213> ORGANISM: Artificial Sequence

204 <220> FEATURE:

205 <223> OTHER INFORMATION: Synthesized peptide

207 <220> FEATURE:

208 <221> NAME/KEY: MISC_FEATURE

209 <222> LOCATION: (7)..(7)

210 <223> OTHER INFORMATION: Xaa is an amino acid having a negatively charged functional group.

group

211 p.

214 <220> FEATURE:

215 (<221> NAME/KEY: MISC_FEATURE

delete

RAW SEQUENCE LISTING

DATE: 10/29/2004

PATENT APPLICATION: US/10/714,343B

TIME: 13:09:28

Input Set : A:\54275.8016.US01.ST25.txt

Output Set: N:\CRF4\10292004\J714343B.raw

216 <222> LOCATION: (7)..(7) *delete*

217 <223> OTHER INFORMATION: Xaa is an amino acid having a negatively charged functional group

218 .

221 <400> SEQUENCE: 8

W--> 223 His Phe Arg Trp Gly Lys Xaa Val

224 1 5

227 <210> SEQ ID NO: 9

228 <211> LENGTH: 8

229 <212> TYPE: PRT

230 <213> ORGANISM: Artificial Sequence

232 <220> FEATURE:

233 <223> OTHER INFORMATION: Synthesized peptide

235 <220> FEATURE:

236 <221> NAME/KEY: MISC_FEATURE

237 <222> LOCATION: (2)..(7)

238 <223> OTHER INFORMATION: Xaa at 2 is DPhe or DNal and Xaa at 7 is an aa having a negative

239 y charged functional group

242 <220> FEATURE: *delete*

243 <221> NAME/KEY: MISC_FEATURE

244 <222> LOCATION: (2)..(7)

245 <223> OTHER INFORMATION: Xaa at 2 is DPhe or DNal and X at 7 is an amino acid having a neg

246 atively charged functional group

249 <400> SEQUENCE: 9

W--> 251 His Xaa Arg Trp Gly Lys Xaa Val

252 1 5

255 <210> SEQ ID NO: 10

256 <211> LENGTH: 8

257 <212> TYPE: PRT

258 <213> ORGANISM: Artificial Sequence

260 <220> FEATURE:

261 <223> OTHER INFORMATION: Synthesized peptide

263 <220> FEATURE:

264 <221> NAME/KEY: MISC_FEATURE

265 <222> LOCATION: (4)..(4)

266 <223> OTHER INFORMATION: Trp is DTrp

269 <400> SEQUENCE: 10

271 His Phe Arg Trp Gly Lys Pro Val

272 1 5

275 <210> SEQ ID NO: 11

276 <211> LENGTH: 8

277 <212> TYPE: PRT

278 <213> ORGANISM: Artificial Sequence

280 <220> FEATURE:

281 <223> OTHER INFORMATION: Synthesized peptide

283 <220> FEATURE:

284 <221> NAME/KEY: MISC_FEATURE

285 <222> LOCATION: (7)..(7)

286 <223> OTHER INFORMATION: Xaa is an uncharged functional group polar aa.

289 <220> FEATURE: *delete*

RAW SEQUENCE LISTING

DATE: 10/29/2004

PATENT APPLICATION: US/10/714,343B

TIME: 13:09:28

Input Set : A:\54275.8016.US01.ST25.txt

Output Set: N:\CRF4\10292004\J714343B.raw

290 <221> NAME/KEY: MISC_FEATURE
 291 <222> LOCATION: (7)..(7)
 292 <223> OTHER INFORMATION: Xaa is an uncharged functional group polar aa. *delete*
 295 <220> FEATURE:
 296 <221> NAME/KEY: MISC_FEATURE
 297 <222> LOCATION: (7)..(7)
 298 <223> OTHER INFORMATION: Xaa is an uncharged functional group polar amino acid.
 301 <400> SEQUENCE: 11
 W--> 303 His Phe Arg Trp Gly Lys Xaa Val
 304 1 5
 307 <210> SEQ ID NO: 12
 308 <211> LENGTH: 8
 309 <212> TYPE: PRT
 310 <213> ORGANISM: Artificial Sequence
 312 <220> FEATURE:
 313 <223> OTHER INFORMATION: Synthesized peptide
 315 <220> FEATURE:
 316 <221> NAME/KEY: MISC_FEATURE
 317 <222> LOCATION: (2)..(7)
 318 <223> OTHER INFORMATION: Xaa at 2 is DPhe or DNal; Xaa at 7 is an aa with an
 uncharged pol
 319 ar functional group.
 322 <220> FEATURE: *delete*
 323 <221> NAME/KEY: MISC_FEATURE
 324 <222> LOCATION: (2)..(7)
 325 <223> OTHER INFORMATION: Xaa at 2 is DPhe or DNal; Xaa at 7 is an amino acid with an
 uncha
 326 rged polar functional group.
 329 <400> SEQUENCE: 12
 W--> 331 His Xaa Arg Trp Gly Lys Xaa Val
 332 1 5
 335 <210> SEQ ID NO: 13
 336 <211> LENGTH: 13
 337 <212> TYPE: PRT
 338 <213> ORGANISM: Homo sapiens
 340 <400> SEQUENCE: 13
 342 Ser Tyr Ser Met Glu His Phe Arg Trp Gly Lys Pro Val
 343 1 5 10
 346 <210> SEQ ID NO: 14
 347 <211> LENGTH: 39
 348 <212> TYPE: PRT
 349 <213> ORGANISM: Homo sapiens
 351 <400> SEQUENCE: 14
 353 Ser Tyr Ser Met Glu His Phe Arg Trp Gly Lys Pro Val Gly Lys Lys
 354 1 5 10 15
 357 Arg Arg Pro Val Lys Val Tyr Pro Ala Lys Glu Asp Asp Glu Ala Ser
 358 20 25 30
 361 Glu Ala Phe Pro Leu Glu Phe
 362 35
 365 <210> SEQ ID NO: 15
 366 <211> LENGTH: 7

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/714,343B

DATE: 10/29/2004
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Input Set : A:\54275.8016.US01.ST25.txt
Output Set: N:\CRF4\10292004\J714343B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 7
Seq#:2; Xaa Pos. 2
Seq#:3; Xaa Pos. 2, 7
Seq#:4; Xaa Pos. 7
Seq#:5; Xaa Pos. 8
Seq#:6; Xaa Pos. 6
Seq#:7; Xaa Pos. 7
Seq#:8; Xaa Pos. 7
Seq#:9; Xaa Pos. 2, 7
Seq#:11; Xaa Pos. 7
Seq#:12; Xaa Pos. 2, 7
Seq#:23; Xaa Pos. 2
Seq#:27; Xaa Pos. 2
Seq#:28; Xaa Pos. 2
Seq#:30; Xaa Pos. 2
Seq#:32; Xaa Pos. 2
Seq#:37; Xaa Pos. 2
Seq#:38; Xaa Pos. 2
Seq#:42; Xaa Pos. 2
Seq#:44; Xaa Pos. 2
Seq#:46; Xaa Pos. 2

VERIFICATION SUMMARY

DATE: 10/29/2004

PATENT APPLICATION: US/10/714,343B

TIME: 13:09:29

Input Set : A:\54275.8016.US01.ST25.txt

Output Set: N:\CRF4\10292004\J714343B.raw

L:32 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:55 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:81 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:107 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:135 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:163 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:195 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:223 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:251 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:303 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
L:331 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0
L:379 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:15,Line#:376
L:399 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:16,Line#:396
L:419 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:17,Line#:416
L:459 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:19,Line#:456
L:479 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:20,Line#:476
L:499 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:21,Line#:496
L:547 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0
L:585 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:25,Line#:582
L:633 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0
L:659 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0
L:677 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:29,Line#:674
L:705 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0
L:723 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:31,Line#:720
L:751 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0
L:769 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:33,Line#:766
L:869 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0
L:895 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0
L:913 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:39,Line#:910
L:981 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:0
L:999 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:43,Line#:996
L:1027 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:0
L:1045 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:45,Line#:1042
L:1073 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:0